

The 50 MHz DX Bulletin

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The 50 MHz DX Bulletin was founded by Harry Schools KA3B. It is dedicated to the understanding and utilization of long distance propagation in the 6-meter Amateur band. The current editor and publisher is Victor Frank, K6FV. Subscription rates are \$20 U.S. third class mail, \$25 U.S./Canada/Mexico airmail, \$25 by surface or \$30 airmail elsewhere for 12 issues. Circulation matters and DX reports should be sent to 12450 Skyline Blvd., Woodside, CA 94062-4541 USA. If you can reach the Internet, my address there is frank@marie.sri.com or frank@crvax.sri.com; if you cannot, and have packet, try K6FV@NOARY.#NOCAL.CA.USA.NA. The Bulletin may be freely quoted, provided that credit is given.

Six Meters Opens from ZL to U.S.!

As a result of monitoring indicators below 50 MHz, Kerry ZL2TPY caught an opening to the U.S.A. January 13. He first raised N5JJS/5 in EM32 at 0047, followed by WD5EWD in EM22 at 0115, WD5K in EM12, N5QJH in EM13, W5EU in EM12 at 0123, and finally WB5LUA at 0132. W5EU also worked ZL2KT and ZL1THQ. Kerry believes the opening is the result of an Es to F2 hookup as there was a large Es opening taking place in the U.S.A. and Mexico at the time.

But wait, there's more! W2CAP/1 relays a message from W3IWU in FN20 in which he relates: "For about 2 minutes at 0046Z 13 January, I heard both ends of a ZL2TPY - N7JJS/5 QSO on 50.110 SSB. Unfortunately no QSO from here. ZLs were worked by other W5s at least as late as 0130 from MS,LA and TX. ZL video on 45.24 and 45.26 was present and remained in until approx 0200z. At the same time extensive East coast opening into single hop W4's and W5's with double hop to XE1J (DK89). Moral: Never give up !!!"

Dan Gautschi writes that, because 50 MHz is still very restricted in HB9, he is only on crossband. He was very pleased to read our meager 144 MHz news, as that is where he works most of his DX, including 1800+ EME QSOs with 586 different stations. He is QRV on 144.015± QRM during EME activity weekends.

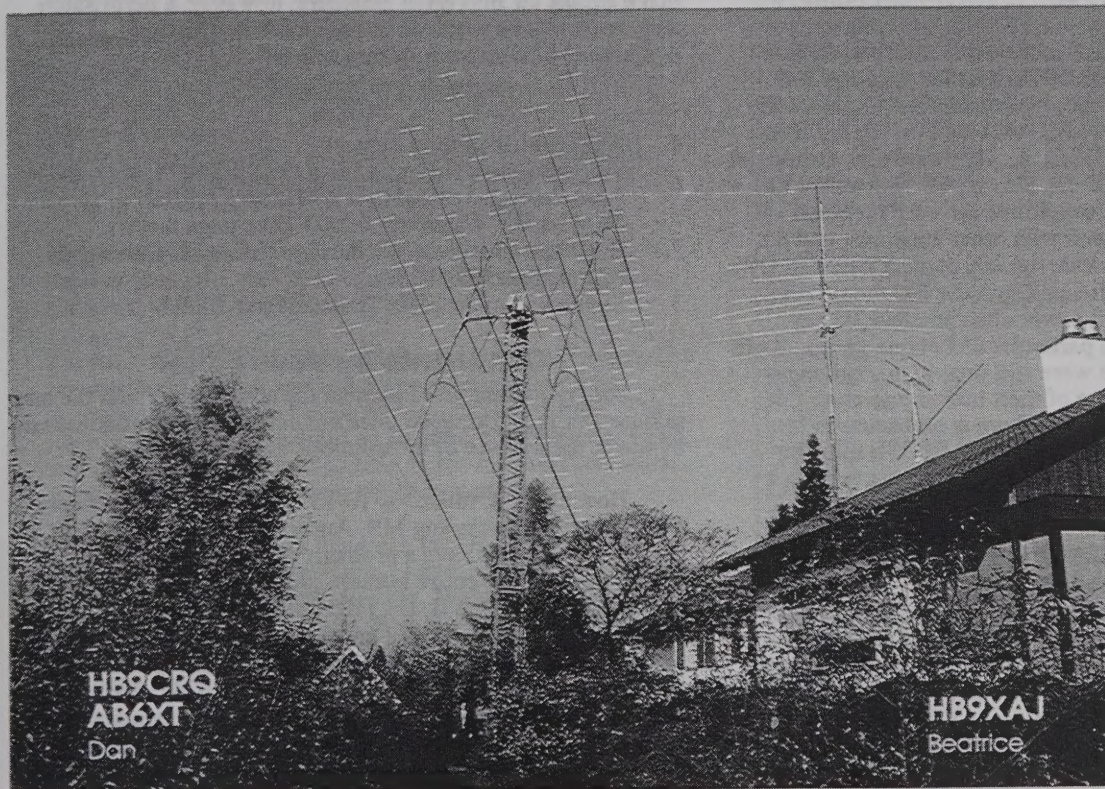
New Proposed 50 MHz DX Windows

by Sam Goda, WA6JRA

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Phone (714)637-3989

Since worldwide 6M amateurs seem to have not learned¹ from solar cycles 20, 21, and 22, I am presenting a new paper in a summary format. This paper introduces: 1. A new CW international super DX calling frequency, 50.0100 MHz zero beat for marginal F2 openings, summer long-haul (3-7 hops) sporadic-E openings, and to avoid the up-band QRM; 2. A new CW calling frequency 50.0950 zero beat for both international DX and continental U.S., with a new CW window 50.090 to 50.100 for clear CW work, minimizing CW QRM around 50.110 and 50.125, selected use during summer Es and winter F2 seasons, and possible long-haul Es during regular Es CQs. During F2 seasons, the CW window will attract more worldwide CW operators to this 10 kHz, 3. a new USB international DX calling frequency 50.110 with the new USB DX window 50.100 to 50.125, without CW QRM; 4. to maintain the USB continental U.S. calling frequency 50.125; 5. to properly use 6M DX liaison frequency 28.885 with alternates. Critical path F2 and long-haul Es should be coordinated between 28.870 to 28.880 for CW operation on 50.0950± or 50.0100. For non-critical liaison and U.S. QSOs, 28.890 to 28.910 should be used.

While simulating CW/USB contacts into a dummy load, the amateur should practice using split VFOs, memories, RIT/XIT, and instant switching of modern transceivers to tune from 50.000, many stops at above frequencies, to 50.200 (upper frequency during big F2 & Es openings). Then this should be applied to local, scatter, Es, and long-haul Es contacts so that the procedures will be semi-automatic by the end of cycle 22. If this



January's photo: HB9CRQ at Menziken, Switzerland

Summary of New 50 MHz DX Windows Proposed by WA6JRA:

50.000-50.010	EME
50.0100	CW international super DX calling frequency.
50.015-50.085	CW international beacons.
50.090-50.100	CW international DX and U.S. calling frequency
50.100-50.125	USB international DX window.
50.110	USB international DX calling frequency.
50.125	USB continental U.S. calling frequency.
50.300	FM frequency
50.400	AM frequency
28.870-28.880	6M DX liaison alternate lower frequencies.
28.885	6M DX liaison main frequency.
28.890-28.910	6M DX liaison alternate upper frequencies.

Please keep off non-EME.

50.01000 MHz zero beat. Also long-haul sporadic-E.
50.XXXX zero beat. Stable and clean signal.
50.0950 zero beat.

The new USB international DX window.
Please keep CW off of 50.110 & USB int. DX window.
Please QSY up. Please keep CW off of 50.125.
Please keep all FM above 50.300.
Please keep all AM above 50.400.
Critical F2 & long-haul Es on 50.0950± or 50.0100.
Please QSY off for not critical DX liaison.
For not critical liaison and U.S. QSOs.

relatively simple 6M band plan & procedures will be properly applied, cycle 23 will be clean. If not properly applied, there may be a repeat of some 6M QRM problems of cycles 21-22.

Finally after three cycles, 6M amateurs have partially accepted 50.100 to 50.125 as the DX window during cycle 22. Also most U.S. contacts above 50.125 have been accepted. However, there are misunderstandings and misuse of the so-called DX window. Experienced & Extra-class U.S. amateurs are over-using CW in this window, especially on 50.110. Foreign DXers are following the Americans. In Southern California, Extra class operators are using 50.110 for their exclusive CW/USB DX frequency; and when a local² Technician calls CQ DX on 50.110 USB, he is called a LID, QRMd, and chased off. Yet these same operators will use 50.110 for USB and reserved for CW; a double-standard operating practice.

No amateur or group has exclusive right to any frequency. In the 6M band, all license classes above the Technician have equal privileges. This means that no-code Technicians can use USB on 50.100-50.125 to work international DX. Since the FCC regulations state that both CW & phone emissions are permitted above 50.100 to 54.000, we cannot exclude the CW mode in this window. This presents a dilemma and I recommend the following: 1. Frequencies 50.100 to 50.125 shall be used mainly for the USB international DX window. 2. Higher class and more experienced operators should use USB, should use CW in the CW window, and should have patience with those less qualified. 3. If a CW DX signal were heard above RST 429 on 50.110, the U.S. station should call him on USB. 4. U.S. amateurs should not make CW calls from 50.100-50.125, especially on 50.110, unless they really feel that conditions are very marginal. 5. DX contacts should be shared with other amateurs, and no U.S. amateur should try to hide the DX contact with fast CW. 6. No higher class or experienced amateur has the right to QRM, harass, or chase off a lower class amateur; or any amateur not a member of a particular 6M clique group. 7. In cycle 22, most Technicians were still unable to work many choice DX countries because of their inability to copy CW. Upgrading takes six months, and there is no excuse to be unable to copy CW in a band where CW & USB must be properly used, mixed, and switched. 8. This paper shows how to use CW/USB to an advantage, not the reverse.

Please use extreme caution when operating near the lower edge of the phone band, 50.101 and the lower edge of the CW band, 50.001. The FCC rules do not permit phone components below 50.100 on a calibrated separate receiver; tests I have made of several 6M transceivers show that U.S. amateurs should not transmit below 50.103 USB with even the better transceivers.³ When calling a DX station on 50.101 USB, please use caution: +2.0 kHz split VFOs, transmit on 50.103 & use the RIT = -2.0 kHz, or transmit on CW with a

700 Hz note on 50.101. Transmitter and receiver CW/USB tracking zero beat frequencies 50.0000, .0100, .0950, .1000, .1100, .1250, and the 700 Hz note frequency in the CW mode (actually received in LSB/USB) should be checked with a calibrated receiver, generator, & frequency counter.

First realizing 6M problems in 1969, experiencing & documenting very severe 6M problems to 6/1993, and writing three in-depth papers¹, I am now writing a one page summary because of previous: misinterpretations, ignorance, inability to read, coverups, 6M business-as-usual, and short attention span of U.S. amateurs. Although in summary form, this paper contains updated information on the only definitive 6M band plan applicable to beyond cycle 25. Please do not file away this paper to be soon forgotten. I sincerely request the cooperation of all worldwide 6M amateurs, the ARRL, and the FCC.

I am the writer, typist, and publisher of this paper; and I am solely responsible for its content. Constructive comments should be sent only to the writer. This paper is not connected with any radio organization or any manufacturer. Until 8/1/95 (approximate end of cycle 22), this paper will be available free upon receipt of an SASE. Clearly write the title, call sign, name, and properly addressed legal size SASE. Please make copies for interested amateurs; however, a permission and credit will be required in radio club newsletters, conference proceedings, or magazines.

Notes

1. Available by special request:
Proposed 50 MHz Band Plan, QST 10/1978, page 68.
Recommended 50 MHz DX Window, 9/30/91.
50 MHz DX Windows, 6/2/93 (five page thesis).
2. Even happened to a W4 during HI-CA-FL-Caribbean F2 opening, 3/1992.
3. Evaluation of 50 MHz Transceivers, 1/2/94.

Comments by Your Editor

Sam requested that I publish the above paper and the one in note 3 in full. Doing so does not constitute an endorsement by me or the bulletin of the opinions expressed therein.

How about it, folks? Is 10-15 kHz enough for ordinary CW operations, including MS, Aurora, and working strings of JAs, or Gs? Do we have a problem with beacons being spread out over the entire bottom 100 kHz? In the bottom 15 kHz we have XE2HWB, DX1HB, JA2IGY, GB3BUX, ZS2SIX, VE7SIX, P29BPL, and SZ2DH (the latter 5 taken from the 94 callbook). EME operators need more flexibility to find a frequency clear at both ends of the path. TV video sidebands and computer radiation add more frequencies that must be avoided. I'm quite willing to move my receiver from .110 to .010 or .095, however, if the DX gang will use it.

Dec. 1993, Jan. 1994 DX Reports

The following reports of 50 MHz DX heard and worked are primarily courtesy of G4UPS, SM7AED, 9H5EE, JA1VOK, P29CW, ZL4AAA, ZL2TPY and VK3OT. Other reports this month have come from K6QXY and W2CAP--perhaps more that I have forgotten. In the tabular listings, the year (1993) is understood, unless the month is 01 (in which case it's 1994) the day of the month precedes the time, and both are in UTC. A +to the right of the time indicates the observation was one of several in a time period and the observation time is probably later than stated. The call at the right is that of the observing station. Symbols V = Video Carrier, F = FM audio, B = beacon, C = CW, S = SSB.

News of Africa

Canary Islands:

10062121 EA8SIX/B	B	PY5CC
10112054+EH8ACW		PY5CC
10122014+EH8ACW		PY5CC

Ivory Coast:

11102320 TU2OJ		PY5CC
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Madeira: CT3FT informed *Six News* that he will not be QRV on 6m this coming summer, as he plans to return to his native Northern Ireland from early May until the Autumn.

10042238 CT3FQ		PY5CC
10062121 CT3FQ		PY5CC
10072149 CT3FQ		PY5CC
10112054 CT3FQ		PY5CC
10122014 CT3FQ		PY5CC
11052224 CT3FQ		PY5CC

Mauritania:

10102137 5T/F5JJK		PY5CC
10112054+5T5JC		PY5CC
10132012+5T5JC		PY5CC
10142054 5T5JC		PY5CC
10192231 5T5JC		PY5CC
10212037 5T5JC		PY5CC
10242218 5T5JC		PY5CC
11252100 5T5JC		PY5CC
11292250 5T5JC		PY5CC

News of Asia

Asian TV:

01040430 ASIAN-TV	(-0715)	S1	V	P29CW
01070600 ASIAN-TV	(WEAK)	49.750	V	P29CW
01080800 ASIAN-TV		S2	49.750	V P29CW

Cyprus: If anyone needs a ZC4MK QSL (6m only, no HF!) send to G0KOM via: 30 Gilsland Rd, Durranshill, Carlisle, Cumbria, CA1 2XD, UK.

Jordan: THE UKSMG has obtained permission to operate a 6m station in Jordan and has proposed operating from Amman during the last week of May and all of June. They have agreed to leave behind an antenna, transverter or radio, and a beacon, and would commit to having local Jordanian amateurs operate the station while they are there.

In order to achieve this goal, the UKSMG is soliciting donations to the "JY Equipment Fund." Donations to Byron Fletcher, 2 Slade Gardens, Codsall, Wolverhampton, Staffs, WV8 1BJ, England. Checks should be made payable to the "UK Six Metre Group" and cash can be sent in your local currency if you wish.

Kirghhiz Republic, UM8: Mike, ex-UL7GCC/UL8GC, reports that UL7 authorities recently refused amateurs an

official 6m allocation. He got married last summer and moved from Kazakh to Kirghhiz. He will be inquiring about a possible 6m permit there.

Malaysia:

12120845 TV		48.250	V	VK3OT
01040500 9M-TV	(-0715)	FAINT	V	P29CW
01080600 9M-TV		S1	48.250	V P29CW

Japan:

12090400 JH1WHS				VK3OT
12090740 JA2BZY				VK3OT
12090745 JH4UCR				VK3OT
12090800 JA6YBR/B		50.016	B	VK3OT
12090810 JA2BZY 55		50.110	S	VK3OT
12100445 JA6YBR/B	(-0500)		B	VK3OT
01040545 JA				VK3
01040547 JH0HQP				VK3OT
01040555 JH3CWA		50.095	C	VK3OT
01040559 JA1,2,3,4,5,6,7,0	(-0702)			ZL4AAA
01040600 JH1WHS		50.150	S	VK3OT
01040600+JMILIK/MOBILE	10W 55		S	VK3OT
01040615 JG1IEF	(-0700)			P29CW
01040615 JH1WHS	(-0700)			P29CW
01040700 JA2IBY/B	(-0715)		B	P29CW
01060752 JA2DWZ				P29CW
01060806 JA2BZY				P29CW
01070552 JA7ZMA/B		50.027	B	VK3OT
01070741 JA2IGY/B	VERY WEAK		B	VK3OT
01180420 JH0HQP	(AFTERNOON TEP)			VK3OT
01180427 JH1WHS				VK3OT
01180440 JK1PVI				VK3OT
01180445 JE2DWZ				VK3OT
01180448 JROFEK				VK3OT
01180450 JH0HZO				VK3OT

Taiwan:

01020430 BV2FG,BV2HS	(-0630)			JA
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News of Europe

Austria:

12131636 OE6FEG 59		S	G4UPS
12141706 OE6FEG 59 JN76SW		S	G4UPS

Belgium: From Frank, ON9CFB (& SM7AED's 6-meter Newssheet): "(On) 14 December I called the BIPT (RTT) and asked for information about the use of 50 MHz in 1994. I was told that we are allowed to use 6m for another year." *Six News* indicates that the Antwerp band I TV transmitter is still running and Belgium military stations can occasionally be heard on 50.100 MHz.

10112054+ON4KST		PY5CC
12252232 ON7YD		SM3EQY

Croatia:

12201605 9A3AT 559 JN86		C	G4UPS
12091856 9A3FT 57 JN83FM (1903)		S	G4UPS

Denmark:

12022235 OZ3AEV,OZ3ZW		S	SM3EQY AU
12022303 OZ1MAX		S	SM3EQY AU
12022341 OZ6OL		S	SM3EQY AU
12091725 OZ7IGY/B 559	(-1740)	B	G4UPS
12121712 OZ3ZW 559		C	G4UPS
12121749 OZ6VHF/B 579		B	G4UPS
12121754 OZ1BVW 57	JO45	S	G4UPS
12121802 OZ4VV 579		C	G4UPS
12121820 OZ4MD & OZ2LD 599		C	G4UPS
12130905 OZ7IGY/B 449	(-0930)	B	G4UPS
12291040 OZ7IGY/B 559		B	G4UPS
12291040+OZ2LD 569		C	G4UPS

England:

12022230 G0DJA		S	SM3EQY AU
12120858 G4UPS			SM7AED
12121725 GB3LER 579		B	G4UPS
12130852 G4UPS			SM7AED MS

12181534	G3SYC		SM3EQY
12181537	G7EXO		SM3EQY
12190945	G4XNS		SM3EQY
12240916	GB3LER/B 599	(-1215)	B G4UPS
12241130	GB3RMK/B 569	(-1215)	B G4UPS

Estonia:

12091635	ES0SIX/B 569	(-1644)	B G4UPS
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Finland: SM7AED's 6-meter Newssheet indicates that OH7AE/9, with operators OH7BO & OH8MSM, was supposed to be in KP17, 18, 27, & 28 on 50.135 from Dec 28 to Jan 5. No heard reports have been received yet.

12241210	OH3MF 599	KP20FR	C G4UPS
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France:

12121645	F1RG	(-1730)	SM7AED
12121645	F6DOK	(-1730)	SM7AED
12121716	F8ZWW	579	C G4UPS
12122138	F1BBB		S SM7AED
12141844	F6ECS	59	S G4UPS
12221730	F5BYM	59	S G4UPS
12221730	FRENCH CARRIER	59 50.100	G4UPS
12221810	FRENCH CARRIER	59+ 50.025	G4UPS
12222029	F6ECS	599 JN12	C G4UPS

Germany: Six News indicates that the German PTT plans to allocate up to 1000 permits for 50 MHz during 1994, and will make a decision at the end of the year regarding any permanent allocation. German broadcast companies will soon start test transmissions with digital FM-radio in the 50 MHz range!

12221729	DL6NCI	59 JO50	S G4UPS
12221749	DJ2RE	579	C G4UPS
12221753	DL7ZB	599 JO51	C G4UPS

Greece:

12201638	SV1SIX/B 579	(-1647)	B G4UPS
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Iceland: Six News for Jan 94 carries a note by TF3LB indicating that the TF3SIX beacon is running again on 50.057 MHz after a two-year period QRT. It has been rebuilt by TF3LB and runs 8 W to a GP from HP94. TF3LB is now also QRV on 50 MHz with a permit lasting until the end of 1994.

Italy:

12091854	IK1IZB	57	S G4UPS
12091900	IK5NTE	59 (1925)	S G4UPS
12131758	IK8AUC	59 JN71	S G4UPS
12141746	I2ADN	559 JN45	C G4UPS
12141759	I4CIL	58 JN64	S G4UPS
12201644	IK2QDX	57 JN45UR	S G4UPS
12201652	IK2JET	579 JN55FL	C G4UPS
12201656	I0CUT	55 JN61	S G4UPS
12201705	IK8DYD	599 JN71	C G4UPS
12201719	IK0OKY	55	S G4UPS
12201730	IK1EGC	59 JN35	S G4UPS
12221753	IK0RWX	55	S G4UPS
12221840	IK5DHM	59 JN53	S G4UPS
12221843	I2ADN	59 JN45	S G4UPS
12221857	I4SJZ	59 JN64	S G4UPS
12251703	IK2QDX	59 JN45	S G4UPS
12251706	I5CTE	57 JN53 & 1810	S G4UPS

Luxembourg:

12261004	LX2DX	(rpt by G4UPS)	SM3EQY
12261103	LX1BX	(rpt via SM7AED)	SM3EQY

Macedonia: Six News reports that Bob, Z32BU, is now 100% QRV from KN01rx. He is using a YU1EU transverter and 25 W PA to a dipole. QSL via Box 467, 91000 Skopje, Macedonia (Tnx ON4PS).

Malta:

10102137	9H5EE		PY5CC
10122014	9H5EE		PY5CC
10212037	9H5EE		PY5CC

12221910	9H1SIX/B 559	(-1945)	B G4UPS
12221916	9H5EE	59 JM75	S G4UPS

Moldavia: Six News has retracted its previous report of UO5OK not being QRV on 6m. They state that "this information was received from a reliable source. However it seems to be inaccurate. Claus, DL7QY has supplied a photocopy of his QSL received for a 50 MHz QSO with UO5OK on July 19, 1993. The card was sent to UT5RP."

Netherlands:

12030002	PAORDY		S SM3EQY AU
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Norway:

12121637	LA9DM	59	S G4UPS
12121651	LA1KHA	579 JO49	C G4UPS
12240916	LA TV INBAND	(-0938)	V G4UPS

Poland:

12121637	SP3UCA	59 JO92	S G4UPS
12121647	SP5CCC	59 KO02	S G4UPS
12121657	SP4CHY	59 KO03GS	S G4UPS
12121704	SP5XML	59 JO92UN	S G4UPS
12131607	SP3UCA	57 JO92	S G4UPS
12221728	SP6GWB	59 JO80	S G4UPS

Portugal:

12221714	CT0SMB/B 559		B G4UPS
12221714	CT0WW/B 599		B G4UPS

Scotland:

12022348	GM7NVA		S SM3EQY AU
12022358	GM4UPL		S SM3EQY AU
12030004	GM1IKQ		S SM3EQY AU

Serbia:

12111630	YU1		G3MY IO93
12131649	YU1EU	599 KN04	C G4UPS
12131654	YU7AS	59 KN05	S G4UPS
12131654	4N1SIX/B	579	B G4UPS
12141707	4N1SIX/B	589	B G4UPS
12201559	YU1ABA	579 KN04	C G4UPS
12201606	4N1SIX/B	579	B G4UPS

Slovakia:

12201606	OM3TTL	559 JN88	C G4UPS
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Slovenia:

12091815	S55ZRS/B 579	(-<1820)	B G4UPS
12131937	S59AM	59	S G4UPS
12131938	S59UN	JN76	S G4UPS
12141640	S55ZRS/B 569	(-1845)	B G4UPS
12141649	S53ZW	599 JN86	C G4UPS
12141729	S59UN	59 JN76	S G4UPS
12201637	S53ZW	599 JN86	C G4UPS
12221904	S59AM	59	S G4UPS
12221906	S57AV	JN65	G4UPS

Spain:

10102137	EH3LL, EH7AH		PY5CC
10112054	EH1AST		PY5CC
12091940	EH3AQJ	579 (-1957)	WKJ OK C G4UPS
12092005	EH7AH	59 IM67OG (-<2020)	S G4UPS
12221716	EH1DVY/P	57 IN82RC & 1743	S G4UPS
12221753	EH3AQJ	599	C G4UPS
12221810	EH3CUU	599 JN12FE	C G4UPS
12221818	EH7BIH	59	S G4UPS
12221849	EH1EH	599 IN82	C G4UPS
12221850	EH7AH	59 IM67	S G4UPS
12221937	EH2LU	59+ IN92	S G4UPS
12222003	EH7AJ	59 IM87	S G4UPS
12222041	EH3ADW	57 JN11	S G4UPS

Sweden: From SM1CNS via SM7AED re December 19: "Conditions were so bad that the remote control to the TV-set did not work."

12022145 SCANDANAVIAN TV V G4UPS AU
 12040902 SM7AED 559 C G4UPS
 12050902 SM7AED 559 C G4UPS
 12070854 SM7AED 559 C G4UPS
 12090902 SM7AED 559 C G4UPS
 12100900 SM7AED 559 C G4UPS
 12110903 SM7AED 569 C G4UPS
 12120858 SM7AED 599 C G4UPS
 12121716 SM7FJE 59 JO65 S G4UPS
 12121759 SK6SIX/B 559 B G4UPS
 12130852 SM7AED 579 C G4UPS
 12131729 SM7FJE 579 C G4UPS
 12140901 SM7AED 559 C G4UPS
 12161212 SM7AED 579 C G4UPS
 12170858 SM7AED 599 C G4UPS
 12200900 SM7AED 569 C G4UPS
 12221220 SM7AED 579 C G4UPS
 12241158 SM7BAE 57 WKG PA/DL -1240 S G4UPS
 12250902 SM7AED 579 C G4UPS
 12260900 SM7AED 579 C G4UPS
 12261004 SM3EQY WKG LX2DX G4UPS
 12270901 SM7AED 569 C G4UPS
 12280901 SM7AED 579 C G4UPS
 12290900 SM7AED 559 C G4UPS

Wales:

12110859 GW3SYL 559 IO81 C G4UPS

News of North America

Canada:

1229 VE7MJT DN09 VE7FEI TROP
 0112 VE7RJ DN09 VE7SKA AU
 01120426 VE6CJC DO02 C VE7FEI AU
 01120440 VE6GRD DO02 S VE7FEI AU
 01120451 VE6XT DO32 S VE7FEI AU
 01120457 VE7RJ DN09 S VE7FEI AU
 01120516 VE7BEE DN09 C VE7FEI AU

Leeward Is., St. Kitts:

11020112+V44KAI,V44KAO PY5CC

Mexico:

10120115 XE1AVM PY5CC
 10122231 XE1AVM PY5CC
 10130010+XE1GE,XE1ABA PY5CC
 10142330 XE2UZL/B B PY5CC
 0103 XE2UZL/B WEAK ALL DAY B K6QXY MS?
 01050300 XE2UZL/B (-0400) B K6QXY
 01130050 XE2UZL/B WD5K
 01130122 XE2HWH S K6QXY
 01150005 XE1J DK89 C ZL2KT
 01151817 XE2UZL/B B K6QXY

Puerto Rico:

10032334 KP4SQ,WP4ARJ PY5CC
 10042332 KP4SQ PY5CC
 10112335 KP4SQ,WP4KJJ PY5CC
 10122359 KP4SQ PY5CC
 10132335 KP4SQ PY5CC
 10152300 KP4HX,KP4SQ PY5CC
 10180001 KP4HX,KP4SQ PY5CC
 10192307 KP4HX PY5CC
 10242351 NP4NP,WP4KJJ PY5CC
 11110052 KP4EOR PY5CC
 11170008 KP4HX PY5CC
 11260021 KP4EOR PY5CC

United States, Central:

10150045 W5VAS/B B PY5CC
 12200217 W5FF DM64 VE7FEI
 12200225 WOLSD DM68 VE7FEI
 12200235 WOMTK DM59 VE7FEI
 12200249 W3XO/5 EM00 VE7FEI
 12200250 W3XO/5 EM00 VE7SKA
 12200300 WD5K EM12 VE7FEI
 12200301 WD5K EM12 VE7SKA
 12200313 WQ5Y EM20 VE7FEI
 12200316 WQ5Y EM20 VE7SKA
 12202301 WOMTK DM59 VE7FEI

01130047 N7JJS/5 55 EM32 S ZL2TPY
 01130115 WD5EWD EM13 S ZL2TPY
 01130123 W5EU 59 EM12 S ZL2TPY
 01130132 WB5LUA S ZL2TPY

United States, East:

10272142 KS2T/B B PY5CC
 01130046 ZL2TPY (-0048) 50.110 S W3IWU

United States, West:

10150045 KB6IGC PY5CC
 12040435 W DM03 (-0500) VE7SKA
 12060330 W DM03, DM13, DM06 (-0355) VE7SKA
 12080350 KB7UWC CN96 VE7SKA AU
 12080350 W7HAH DM26 & DM47 VE7SKA AU
 1215 N7YAP DN07 VE7FEI TR?
 1217 N7YAP DN07 VE7FEI TR?
 1218 N7YAP DN07 VE7FEI TR?
 12180235 W DM03, DM04 (-0310) VE7SKA
 12180243 KA1EYY DM04 VE7FEI
 12180245 KD6EQW DM04 VE7FEI
 12200251 AA7MJ DN40 VE7FEI
 12200427 N7YAP DN07 VE7FEI
 12201930 K6FV/B CM87 B VE7FEI
 12210137 KR8L DN43 VE7FEI
 0103 WD7Z/B WEAK ALL DAY B K6QXY MS?
 01031853 WB9AJZ/6 CM87 VE7FEI MS
 01031956 AJ6T CM87 VE7FEI MS
 01032009 W6WVK CM88 VE7FEI MS
 01032027 N7EYG CN84 VE7FEI MS
 01032100 KG7CN DN23 VE7FEI MS
 01130046 N7JJS/5 WKG ZL2TPY 50.110 S W3IWU
 01151817 W7US/B B K6QXY
 01151817 WD7Z/B B K6QXY

News of Oceania

Australia, Capital Territory (VK1):

12280356 VK1DO 50.110 JA3CEQ

Australia, New South Wales (VK2):

12040404 VK2GLS 50.130 JH1BSJ
 12040417 VK2ZXC 50.155 JH1BSJ
 01010155 VK2,3,4 Es MUF 89-108 MHz ZL4AAA
 01010801 VK2 ZL4AAA
 01012320 VK2,3 Es MUF > 88 (-020705) ZL4AAA
 01020250 VK2DVZ,ZAB 144.100 ZL4AAA
 01040550+VK2GLS,ZXC (-0655) JA
 01162239 VK2GLK FO5DR

Australia, Victoria (VK3):

12030625 VK3OT 50.110 C JA5CMO
 12040314 VK3SIX 50.110 JA1VOK
 12040325 VK3DUT 50.146 JA1VOK
 12040358 VK3ANP 50.150 JA1VOK
 12040411 VK3DET 50.145 JH1BSJ
 12040420 VK3AMK 50.180 JH1BSJ
 12080417 VK3LK 50.110 JA3JTG
 12080420 VK3OT 50.120 JA3JTG
 12080421 VK3BRZ 50.120 JA3JTG
 12080423 VK3DUT 50.120 JA3JTG
 12080428 VK3JST 50.120 JA3JTG
 12080431 VK3AMK 50.120 JA3JTG
 12100610 VK3DUT 50.120 JA3JTG
 12100614 VK3BXG 50.120 JA3JTG
 12100620 VK3YDE 50.120 JA3JTG
 12100717 VK3DET 50.110 JA3JTG
 12100718 VK3DUQ 50.130 JA3JTG
 12100721 VK3LK 50.130 JA3JTG
 12100723 VK3YZP 50.130 JA3JTG
 12100726 VK3TMJ 50.130 JA3JTG
 12100729 VK3KAY 50.130 JA3JTG
 12280402 VK3DUT 50.130 JW1WHS
 12280408 VK3XQ 50.130 JW1WHS
 01010755 VK3SIX/B B JA1
 01040000 VK3SIX/B (-0700) B P29CW
 01040550+VK3DUQ,TKP,YZP,ZNF JA
 01040550+VK3LK,OT,AMK,AZY,BMV,DET JA
 01050210 VK3SIX/B B P29CW
 01050230 VK3SIX (-0300) JA
 01070330 VK3SIX/B (FOR HOURS) B P29CW

01070710+VK3DUT		P29CW
01080440 VK3SIX/B (FOR HOURS)	B	P29CW
01142345 VK3OT (&150015)		FO5DR
01150000 VK3OT (hrd)	50.110	P29CW
01150000 VK3SIX/B (-<0115)	B	P29CW

Australia, Queensland (VK4):

12040358 VK4CV	50.130	JH1BSJ
12040555 VK4APG	50.170	JA1VOK
12040630 VK4WTN	50.140	JA5CMO
12040655 VK4ARN	50.140	JA5CMO
12110740 VK4BRB/B		B VK3OT
12190040+VK4RGG/B	ALL DAY	B VK3OT
0101 VK4BRG/B, VK4ABP/B		B VK3OT
01010030 VK4RGG/B (-0110)		B ZL4AAA
01010247 VK4BRG/B (-0340)		B ZL4AAA
01010247 VK4RGG/B (-0350)		B ZL4AAA
01012209 VK4RGG/B (-2224)		B ZL4AAA
01012224 VK4BRG/B		B ZL4AAA
01012320 VK4,5 Es MUF > 88 (-020705)		ZL4AAA
01020604 VK4 PAGER	148.040	ZL4AAA
01040000 VK4RIK/B (-0700)		B P29CW
01050230 VK4JH (-0300)		JA
01050430 VK4RIK/B		B P29CW
01060705 VK4JH		P29CW
01060732 VK4DO		P29CW
01070500+VK4RGG/B, VK4BRG/B		B VK3OT
01070630 VK4JH		VK3OT
01070710+VK4JH		P29CW
01080346 VK4UTT	50.110	S P29CW
01080436 VK4RIK/B (FOR HOURS)		B P29CW
01170800 VK4BRG/B		B VK3OT
01200742 VK4WC?	50.110	P29CW
01200745 VK4SIX	50.120	S P29CW
01200745+VK4KIT	50.120	S P29CW
01200800 VK4ABP/B LONGREACH	52.347	B P29CW
01200912 VK4DO		P29CW
01200940 VK4TL?		C P29CW
01230800-VK4RIK/B (<0830)		B P29CW

Australia, South (VK5):

12040630 VK5BC	50.120	JA5CMO
12040650 VK5RO	50.110	JA5CMO
12080434 VK5NC	50.120	JA3JTG
01040000 VK5VF/B (-0700)		B P29CW
01040550+VK5NC (-0655)		JA
01050210 VK5VF/B		B P29CW
01050227 VK5s (-0330)		P29CW
01070345 VK5VF/B (FOR HOURS)		B P29CW
01150015 VK5VF/B (-<0115)		B P29CW
01150033 VK5LP	50.120	S P29CW
01150110 VK5KVZ		P29CW
01162243 VK5BC		FO5DR

Australia, West (VK6):

12020357 VK6JJ	50.106	C JA1AUD
12020359 VK6RO	50.103	C JA1AUD
12040643 VK6PA	50.170	JA1VOK
12040655 VK6PA	50.110	JA5CMO
12041005 VK6JQ	50.110	C JA5CMO
12041010 VK6YU	50.110	JA5CMO
12041035 VK6ZFG	50.110	JA5CMO
12041050 VK6WG	50.110	C JA5CMO
12041100 VK6JJ	50.130	C JA5CMO
12090900 VK6YU		VK3OT ES
12211142 VK6AS (->1400)		VK3OT
01012354 VK6AKT, YU, JJ		ZL4AAA

Australia, Tasmania (VK7):

12040542 VK7GUN	50.130	JA1VOK
12040645 VK7GUN	50.110	C JA5CMO
12070540 VK7AN	50.110	JA5CMO
12090520 VK7GUN	50.110	C JA5CMO
12180507 VK7DT	50.120	JA3JTG
12220608 VK7ZMF	50.110	JA3JTG
01040000 VK7RST/B (-0700)		B P29CW
01040550+VK7ZAR, ZMF (-0655)		JA
01070710+VK7GUN		P29CW
01200843 VK7GUN	50.120	S P29CW

Australia, North Territory (VK8):

12120900 VK8VF/B	3000 KM	B VK3OT
01040640 VK8RH		VK3OT
01060430 VK8VF/B (-0630)		P29CW
01070500+VK8VF/B		B VK3OT
01080450 VK8RH	50.130	S P29CW
01080502 VK8VF/B (FOR HOURS)		B P29CW
0116 VK8RH		P29CW
01160445 VK8VF/B (FOR HOURS)		B P29CW
01230800-VK8VF/B (<0830)		B P29CW

Australia, Lord Howe Island:

12090400 VK9YQS/L (Lord Howe Is.)	VK3OT
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Fiji: Bob Cooper, ZL4AAA, reports hearing Hindi language broadcast programming on 146.100 January 2 around 0100. He thinks it was a STL (studio-transmitter link). Is there any radio amateur two meter activity in Fiji? He says he wasted hours calling CQ on every likely frequency without results.

He relays that there are five master FM broadcast stations in Suva, and a number of in-parallel translators as follows: 95.4/96.0/99.6 in parallel, Hindi language, English news on the hour; 97.4/98.8/101.6/102.6 in parallel Hindi; 98.0 Hindi, no parallels; 98.4 Hindi, no parallels; 104.0 in English, no parallels.

01010350 3D2 Es MUF 98.8	ZL4AAA
01020014 3D2 Es MUF >95.4 (-0640)	ZL4AAA
01160536 3D2ER 55	50.130 S VK3OT

French Oceania:

01020400 FO5DR/B	COPIED BY VK3LK,OT,VK5NC
01122024 FO5DR/B	B ZL2TPY
01142200 FO5DR	ZL4AAA
01142345 FO5DR (&150015)	VK3OT
01142346 FO5DR 559 4800KM	50.109 C VK3OT
01142346 FO5DR/B (-0015)	50.049 B VK3OT
01162239 FO5DR	VK2GLK
01162243 FO5DR	VK5BC

Hawaii:

12220430 KH6HME/B (-1600)	144.17	B K6QXY	TROP
12230430 KH6HME/B (-2000)	432.07	B K6QXY	TROP

Papua/New Guinea:

12050517 P29CW	50.106	JA1VOK
12090510 P29CW	50.110	C JA5CMO
12090950 P29CW (-1110)	3400 KM	VK3OT
12091000 P29BPL/B	50.019	B VK3OT
12290805 P29CW	50.110	C JA3JTG
01040300 P29CW 57	50.120	S VK3OT
01040340 P29BPL/B &0620	50.019	B VK3OT
01040550 P29CW		JA
01040630 P29VPC		VK3OT
01070500+P29BPL/B		B VK3OT
01080450 P29CW		S VK6

New Caledonia:

12090340 FK8DH		VK3OT
12310053 FK8DH	50.140	VK3OT
01012355 FK8DH		ZL4AAA
01170745 FK1UH		VK3OT

New Zealand: Bob Cooper, ZL4AAA, reports a very productive 27+ hour trans-Tasman tropo session. FM broadcast from Queensland (typically 2100km/1250m+) appeared very suddenly at 0854 January 2 and lasted without fading out until past 1200 on January 3. A very stable high pressure area sat over the northern Tasman sea until a front from the south broke it up around 1200 on the 3rd.

144 MHz tropo: more than 60 VK2 & VK4 stations worked between 1980 km and 2350 km including VK2ZAB worked earlier in the day on Es. Signals were very stable and at times very strong. Examples: around 0900 on the 3rd, I

worked several VK2s near Coffs Harbour on 146.500 simplex FM and with me running 20 Watts to 4 element vertical yagi at 15m, I tested the power level required. The best was 300 mW run by VK2AWA with a vertical ground plane 2.5m above ground; and VK2BRG running 1 W to his hand-held rubber duckie at distances around 2040 km. Furthest south, Sydney; furthest north Bundaberg (Qld.)

432 MHz tropo: Worked 22 VK2 and 4 stations at distances between 1980 km and 2215 km. Best power/distances QSOs included VK4ANP running 10 W to a homebrew log periodic (2215 km) and VK2MZ running 16 W to a discone antenna (1990 km). Furthest south, Sydney; furthest north, 100 km NW of Brisbane.

In the best case, FM broadcast signal levels from Brisbane stations above 100 MHz reached within 6 dB of my nearest local FM station (12 km distant from me.) Best shot at longer hauls was at the beginning of the opening (1030-1200 on the 2nd) when Rockhampton (2568) and MacKay (2827 km) broadcast FM was very loud here, but no amateur activity at that time beyond 2350 km.

Cliff, ZL1MQ, reports that the tropo opening covered only the north end of ZL1, not going lower than Whangarei. He reported ZL1IU worked VK5NC and VK5DK in Mt. Gambia, S. Australia January 2 on 144 MHz.

12170900	ZL2AGI		VK3OT
12180515	ZL4TBN	50.130	JA3JTG
12180625	ZL4TBN	50.140 S	VK3OT
12180630	ZL3MHF/B	50.043 B	VK3OT
12180635	ZL2MHF/B	51.028 B	VK3OT
12180715	ZL2KT, ZL2AYO		VK3OT
12180715+ZL3AAN, ZL3ADT	59+		VK3OT
12180715+ZL3TJZ			VK3OT
12180715+ZL4MB, ZL4LV	59+		VK3OT
12190040+ZL3MHF/B	ALL DAY	B	VK3OT
12210900	ZL2TPY (-1300)		VK3OT
12210900	ZL3MHF/B (-1300)	B	VK3OT
12210900	ZL4TBN (-1300)		VK3OT
12290740	ZL4AAA	50.110 C	JA3JTG
12300430	ZL2KT	50.140	JA5CMO
0101	ZL3MHF/B, ZL3TY	B	VK3OT
01030250	ZL2TPY (-0310)		JA
01040550+ZL2TPY, ZL4AAA	(-0655)		JA
01070710+ZL4AAA			P29CW
01070810	ZL3TY		P29CW
01080800	ZL (-0930)		P29CW
0113	ZL2KT, ZL1THQ		W5EU
01130046	ZL2TPY WKG N7JJS/5	50.110 S	W3IWU
01130050+ZL			WD5K
01130100	ZL2TPY (-0200)		WB5LUA
01142200	ZL4AAA		FO5DR
01142330	ZL4AAA TWO MTRS OPEN		VK3OT
01150900	ZL4AAA		VK3OT
01160000	ZL-TV (-0230)	45.240 V	K6QXY
01160000	ZL-TV (-0230)	45.250 V	K6QXY
01160000	ZL-TV (-0230)	45.260 V	K6QXY
01170937	ZL2KT (OPEN TO ZL ALL DAY)		VK3OT
01230800	ZL1THQ		VK3OT
01230800-ZL-TV AUDIO	S1-6	50.750 F	P29CW
01230800-ZL3MHF/B	(<0830)	B	P29CW
01230800+ZL2TPY			VK3OT
01230900	ZL4AAA (OPEN ALL EVENING)		VK3OT

News of South America:

Argentina:

10132012	LU1DMA	PY5CC
11031824	LU1DMA, LU4DMX, LU7DZ	PY5CC
10081733	LU1DMA, LW5EJU	PY5CC
10210138	LU4HE	PY5CC
11182001	LU7VB	PY5CC
11232215	LU8EEM	PY5CC

Aruba:

11260021+P4/OZ1HJP	PY5CC
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Brazil, Fernando de Noronha:

11020112	PY0FF	PY5CC
11032350	PY0FF	PY5CC

Falkland Is.: *Six News* Jan 94, relays a report from Adrain, G0KOM (ex ZC4MK/VP8COI) that he heard nothing on 6m during his four month stay (May-Aug 1993). Just before his departure, the club station 3 element beam was destroyed in 80 mph gales. Two other stations have 6m equipment on the Falklands, however long working hours and little interest mean 6m is rarely (if ever) switched on.

Paraguay:

10160101	ZP5PT	PY5CC
10210138	ZP5PT, ZP5ZR	PY5CC

Surinam:

10022344	PZ1EL	PY5CC
10130010	PZ1EL	PY5CC

Venezuela:

10060123	YV5ZZ	PY5CC
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Beacon News

Estonia: *Six News* reports that ES6SIX/B will probably have moved to 50.073 MHz by now. (Tnx SM0KAK.)

Poland: *Six News* reports two new beacons, SR5SIX in KO02 and SR6SIX in JO81, but the frequencies are unknown at press time.

Sabah: *Six News* reports that a beacon on 50.014 MHz for 9M6SMC has been completed and sent to G4CVI at South Midland Communications ready for shipping to Sabah.

United States:

VE7FEI reports that Bill, W0MTK in DM59, now has a beacon on 50.0651.

Cosmic Noise

Leif Johansen, LA9ZV, writes: "Thanks for the 50 MHz DX bulletin. In issue 4/93 you discussed the cosmic noise. My QTH in Moss is 59.5° N 10.5° E and local time is UTC + 1h. (Summer +2h). The noise seems to come from a "hot spot" and can be clearly observed switching my two antennas. The noise level increase is about one S unit, and the same "pattern" has been the last three summers. You got the times wrong! On June 18, the noise is at 180° around 2300-2330 UTC. At 2000 local time, the noise is about 100° !

I have good antennas on 21 and 28 MHz, and believe the noise is also on HF. I'm not certain because the Eastern Europe RF curtain. G3JVL comments "textbook." G4IGO is right about noise and Es, sometimes when I have Es to the north, I have observed a few dB of "white noise". Our propagation to the N - NW is very interesting. (See QST Feb. 1967). On 28 MHz, I have worked 313+ DXCC and have seen hundreds of openings over the North Pole during evenings and nights, South America, U.S.A., Pacific, and sometimes JAs. Sometimes these openings are better in the north like OY-TF-OX-JW, etc.

I got my TS609S two years ago, and have seen many openings to the U.S.A. on 35 & 43 MHz. SM6PU for many years studied the night openings on 28-35 MHz and 43 MHz. I have heard some U.S.A. signals on 50 MHz, VE2TOW is

heard on winter/summer Aurora Es, also the OX3VHF beacon and 35/43 MHz are in until after 0200 UTC. The only 6m QSO I have made to the U.S.A. with the propagation is K8MD on July 1, 1993 at 0110. That night, OX and 35.2-35.6 MHz U.S. pagers were in until about 0200-0300. 28 MHz was open to the U.S.A. and VK6 also."

Leif sent along a listing of dates, times and directions from which he received the cosmic noise the strongest. From this list it quite likely that he is tracking the galactic center (GC). Some times the GC is below the horizon, and some times the directions are north of its rising azimuth. These suggest that he is also receiving sources north of the GC, but there is plenty of noise there too. We will have more on this subject in future issues.

EME News

From SM7AED's 6-mtr Newssheet: (ON4ANT in JO20ar) is looking for EME skeds with stations running at least two long yagis and kW. He is running 4*17b2 Cushcraft, 2*3CX800A7. Proposal by packet or EME net. ON4ANT@on7rc.bel.eu.

K6QXY reports that SM7BAE worked W7HAH Jan 31 at 0620; both stations running single yagis.

TS690 Audio Modification

by Mike Gotch, G0IMG
from Jan. 94 *Six News*

I bought one of these rigs in 1992. During initial tests, I found the transmitted audio quality was not very good on 6m SSB (it was perfectly OK on other bands.) I was able to compare it with a TS680 I have and the difference was very noticeable.

I rang my supplier with these comments and he dispatched a replacement. Tests on this second rig showed exactly the same problem, although it was just slightly better. I decided to investigate by feeding a two-tone test signal into the mike socket and looking at the RF output on a scope.

The TS690 showed quite noticeable distortion at the crossover point, but the TS680 was OK. I took the covers off the TS690. Checking at the input of the 10 W driver module (Toshiba M57735) showed a clean crossover, but at the output the distortion was present.

Checking the voltage on pin 3 of the module (the bias pin), I found 6.8 V on the TS690 and 7.8 V on the TS680. I removed the wire from CN3 pin 4 (which goes to pin 3 of the module) and connected a separate 8 V supply. Rechecking at the output of the module and at the output of the 50 W PA now showed a clean crossover. The data sheet for the Toshiba M57735 calls for 9 V on pin 3!

The TS690 Service Manual shows 6.8 V at this point, so it would appear to be a design fault rather than a faulty rig. I built a small circuit (with 8 V regulator running from +13.8 V supply) on veroboard to solve the problem and mounted it close to the module.

Elsewhere in that issue, PA0ERA suggests: "Not all TS609S will respond to increasing the voltage on pin 3 of the Toshiba M57735 to 8 V. I suggest 9 V (Toshiba spec). The two blue wires attached to CN7 (filter unit) are susceptible to RF pick-up; fit ferrite beads. Finally, the small grey coax folded inside the filter unit should be re-routed outside of the filter compartment."

QRZ 1.825?

N6CA notes that more than a few of the 6m gang have been frequenting 160m CW. Might, he suggests (only half tongue-in-cheek), 1825 kHz, be a suitable liaison frequency for those of us who get on the air at night, long after 28885 has gone south?

QSL Cards

"Please ask in the next bulletin if anyone has ever gotten a QSL from VK4KJL?? My only unconfirmed Grid Field." -W4DR (who indicates 69 grid fields worked on 6m).

Six News indicates that there seems to be a problem with mail reaching the PO Box of SV5TS. A recent QSO with him on 15m suggests he is not aware of the problem. The vast majority of G stations who have sent a QSL since late July have received no reply. Someone at the local PO seems to be collecting dollars at the moment! Register your QSL to guarantee delivery.

Pim, PA0TLX, asks in *Six News*, "why the sudden increase in non-QSLing DXpeditions? Waiting for hours in a pile-up, sending a \$ and SAE to a named QSL manager, should result in a QSL! I have at least four examples in 1993. At least mention during the pile-ups that you are a non-QSLing DXpedition. This will help to reduce the pile-ups quite nicely."

Mail Bag

Correspondence from UA0MF to K6QXY
December 17, 1993

I read your query in the 50 MHz DX Bulletin Oct 93 issue. I never received a letter from you, but anyway I'd like to give you some info about my 50 MHz activity. By the way, it's a big problem to use the 50 MHz band here in Vladivostok due to a TV transmitter operating on Russian TV channel I (48-52 MHz).

I can operate only some of Mondays when the TV transmitter is in testing or repair--as is usual on every 3rd Monday of the month. The best opportunity to have a contact with me is on the 3rd Monday of July between 0001 til 0500Z on 50.110 CW and SSB.

January 1, 1994 the old USSR's callsign system will be changing, and I'll be using a new call sign of our club station (RK0LWA) or my new home call sign (UA0MF). All QSL only direct to my P.O. Box 20, Vladivostok, 690021, RUSSIA

The summer season I'll try to operate from my Rhusskiy Island's portable QTH (AS-66 for IOTA) with call sign UA0MF/A. My equipment is a TS-690S and 6 el. yagi.

Please look for me on 50.110 every 3rd Monday of the month. I hope to contact you and other 50 MHz DXers.

Disappearing Club Subscriptions

Six News reports problems with their former US Country Manager allegedly not forwarding subscription moneys. Should you still be waiting for your *Six News* issues, their subscription manager's QTH is Mr. C. Gare, G3WOS, Old White Lodge, 183, Sycamore Rd, Farnborough, Hants GU14 6RF U.K. The US Country Manager was Charles Ruhlman, WA2LPG, who is QTHR and (914)877-7512.